CERVIX UTERI

Table 1: Incidence and mortality summary, South Dakota 2003

	All races	White	American Indian
Incidence counts	16	14	2
S.D. incidence rate[1]	4.4	§	§
U.S. incidence rate[2]	8.0	7.7	▓
S.D. death count[1]	9	6	3
S.D. death rate[1]	§	§	§
U.S. death rate[2]	2.5	2.2	2.7

Notes: ▓ Rate is not available

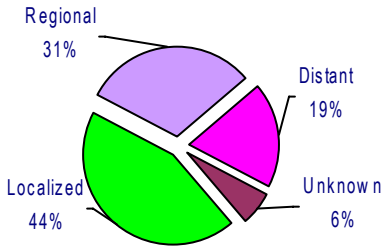
§ Rates less than 16 counts are supressed because of instability of rates

Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population

Source: [1] South Dakota Department of Health

[2] *SEER* 13 Registries *1990-2003*

Figure 1: Cervix uteri stage at diagnosis,[3] South Dakota, 2003



Note: *In situ* cervical cancers are not reportable

[3] SEER SUMMARY STAGE

Source: South Dakota Department of Health

Descriptive Epidemiology

Incidence: Invasive cervical cancer accounted for less than 0.5% of new cancer cases. There were 16 invasive cases, of which 14 were white, 1 other race and 2 American Indian women. Eleven cases (68 percent) were diagnosed under 50 years old. Incidence peaks were at 30-34 and 45-49 age groups.

Stage at diagnosis: 44% of all cases were diagnosed at localized stages compared to 60% in 2002. Fifty-one percent were diagnosed at regional and distant stages compared to 28% in 2002

Mortality: Cervical cancer accounted for 0.5% of cancer deaths with a total of 9 deaths, 3 American Indian and 6 white women. One death was at a young age of early thirties. Overall the trend in the five-year mortality rate showed an increase of 7.8 Percent Change (PC) with an annual percent change (APC) of 4.2% for South Dakota. Death counts for individual races have been too low to calculate trends.

The mortality/incidence ratio was 0.6 for all women in South Dakota, 0.4 for white women and 1.5 for American Indian women.

Years of Potential Life Lost ($YPLL_{75}$) in 2003: 72 years for whites and 61 years for American Indians.

Average Years of Life Lost ($AYLL_{75}$) in 2003: 18 years for whites and 30.5 years for American Indians

Risk and Associated Factors

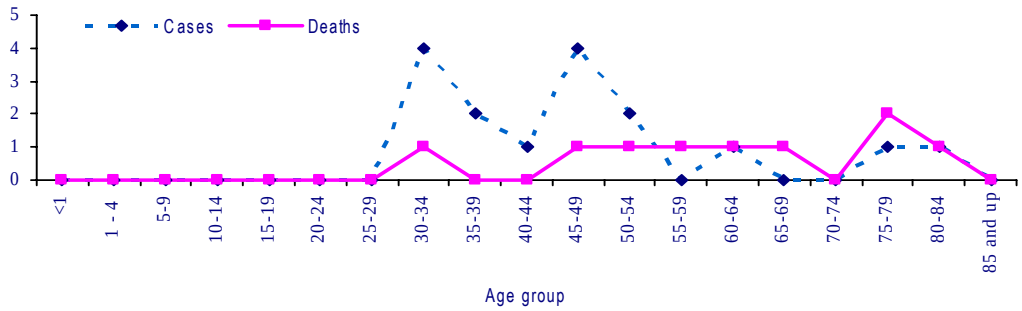
Infection with Human Papilloma Virus (HPV) is a primary risk factor. Of the numerous HPV viruses, HPV-16 is the type most commonly found in precancerous and cancerous lesions, followed by HPV-18. In fact HPV-16 and 18, and along with 11 other virus types, are responsible for 90 percent of HPV infections that result in HSIL, severe changes in cells lining the cervix, and cervical cancer. Smoking, intercourse at an early age, multiple sexual partners, HIV, and other sexually transmitted diseases are known risk factors. Smoking is considered an associated risk factor.

Early Detection and Prevention

Regular use of Pap testing reduces deaths form cervical cancer. Women who have not been screened face a three-to 10-fold higher risk of developing invasive cervical cancer. Cure rates are nearly 100 percent when diagnosed at the pre-invasive stage. Screening should begin about three years after a woman begins having sexual intercourse or no later than 21 years old. Older, poor, less educated women and new immigrant women are less likely to be screened and are at greater risk of dying as well.

A new vaccine prevent s infection form four types of the human papillomavirus (HPV). Two of the HPV types targeted by the vaccine (HPV-16 and HPV-18) are responsible for about 70 percent of the cases of cervical cancer worldwide. The other two HPV types (HPV-6 and HPV-11) cause approximately 90 percent of the cases of genital warts.

Figure 2 : Cervix uteri cancer cases and deaths, South Dakota 2003



Source: South Dakota Department of Health

Figure 3 : Cervix uteri age-specific incidence and death rates, South Dakota 2003

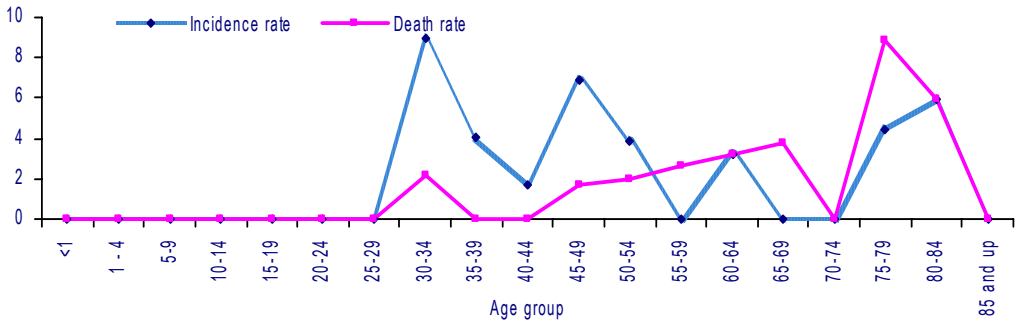


Table 2: Cervix uteri age-adjusted incidence 2001-2003 and age-adjusted death rates 1999-2003, South Dakota and United States

		All races combined		White	American
		Total	Female		Indian/PI
2001-2003	SD incidence count	68	68	54	12
3 years	S.D. incidence rate[1]	6.1	6.1	5.2	§
incidence[1]	U.S. SEER incidence rate[2]	7.9	7.9	7.4	7.1
1999-2003	SD death count	45	45	35	10
5 years	S.D. death rate[2]	2.2	2.2	1.8	§
deaths[1]	U.S. SEER death rate[3]	2.7	2.7	2.4	2.6

Healthy People 2010 Objective: 2.0 deaths per 100,000 females

Note:§ Rates based on < 16 counts are supressed because of instability of rates.

Rates are per 100,000 persons, age-adjusted to the 2001 U.S. standard population

Source: [1] South Dakota Department of Health [2] *SEER Cancer Statistics 1975-2003*